

WHAT IS CLAIMED IS:

1-24 (Canceled)

25. (New) A security element for documents in general and particularly for banknotes, security cards and the like, comprising a flexible support layer that has, on at least one face, a layer of metallic material wherein said metallic layer has a substantially uniform thickness with a tolerance of less than +/- 4%, and wherein on said metallic layer at least regions are provided having a metal thickness that is less than 25% and more than 1% of the thickness of the layer of metallic material of the surrounding portions.

26. (New) The security element according to claim 25, wherein said regions can be detected visually.

27. (New) The security element according to claim 25, wherein said metallic layer is made of aluminum.

28. (New) The security element according to claim 25, wherein said metallic layer is made of chromium.

29. (New) The security element according to claim 25, wherein said metallic layer is made of nickel.

30. (New) The security element according to claim 25, wherein said metallic layer is made of copper.

31. (New) The security element according to claim 25, wherein said metallic layer is made of a combination of aluminum, chromium, nickel and/or copper.

32. (New) The security element according to claim 25, wherein said metallic layer has a thickness of less than 3 optical density.

33. (New) The security element according to claim 25, further comprising fluorescent substances with a solid background on said support layer.

34. (New) The security element according to claim 25, comprising discontinuous fluorescent substances on said support layer.

35. (New) The security element according to claim 25, comprising holographic images with a solid background on said support layer.

36. (New) The security element according to claim 25, comprising discontinuous holographic images on said support layer.

5 37. (New) The security element according to claim 25, comprising continuous magnetic substances on said support layer.

38. (New) The security element according to claim 25, comprising, on said support layer, discontinuous magnetic substances that provide a code.

39. (New) The security element according to claim 25, comprising  
10 refractive substances on said support layer.

40. (New) The security element according to claim 25, comprising color-changing substances on said support layer.

41. (New) A security element for documents in general and particularly for banknotes, security cards and the like, comprising a flexible  
15 support layer that has a layer of metallic material on at least one face wherein said metallic layer has a uniform thickness with a tolerance of less than +/- 4%, and wherein at least regions provided with a metal thickness that is comprised between 0.45 and 0.012 optical density are provided on said metallic layer.

20 42. (New) The security element according to claim 41, wherein said regions can be detected visually.

43. (New) The security element according to claim 41, further comprising fluorescent substances with a solid background on said support layer.

25 44. (New) The security element according to claim 41, comprising holographic images with a solid background on said support layer.

45. (New) The security element according to claim 41, comprising continuous magnetic substances on said support layer.

46. (New) The security element according to claim 41, comprising  
30 refractive substances on said support layer.

47. (New) The security element according to claim 41, comprising color-changing substances on said support layer.

48. (New) A security element for documents in general and particularly for banknotes, security cards and the like, comprising a flexible  
5 support layer that has a layer of metallic material on at least one face, characterized in that it comprises, on said metallic layer, first regions and second regions that have a lower thickness than the layer of metallic material of the surrounding portions, said first and second regions having mutually different thicknesses.

10 49. (New) The security element according to claim 48, wherein said regions can be detected visually.

50. (New) The security element according to claim 48, further comprising fluorescent substances with a solid background on said support layer.

15 51. (New) The security element according to claim 48, comprising holographic images with a solid background on said support layer.

52. (New) The security element according to claim 48, comprising continuous magnetic substances on said support layer.

20 53. (New) The security element according to claim 48, comprising refractive substances on said support layer.

54. (New) The security element according to claim 48, comprising color-changing substances on said support layer.

55. (New) A method for providing a metallic layer on a security element for documents in general and particularly for banknotes, security  
25 cards and the like, wherein it provides for the deposition of said metallic layer by means of two series of crucibles installed in two contiguous vacuum chambers, a thickness substantially equal to half of the total thickness being deposited for each pass for each series of crucibles.

30 56. (New) A method for providing a security element for documents in general and particularly for banknotes, security cards and the like, consisting

in metallizing at least one face of a support layer made of polyester; in applying, by printing, an ink for protecting said metallic layer; in demetallizing the ribbon in a tank that contains 52-54% phosphoric acid at a temperature of 46 °C +/- 0.1 °C, with a retention time of 20-25 seconds.

5           57. (New) A method for providing a security element for documents in general and particularly for banknotes, security cards and the like, consisting in metallizing a support layer made of polyester, in providing on the resulting metallic layer a print by means of an ink for protecting said metallic layer except for the first regions; in providing a first demetallization  
10 by means of an acid; in applying to at least some of said first regions a protective layer by means of a protective ink; in performing a second demetallization in order to provide second regions that have a lower thickness of metal than said first regions.

          58. (New) A document in general, further comprising a security  
15 element according to claim 25, which is fully inserted therein.

          59. (New) A document in general, further comprising a security element according to claim 25, which is at least partially inserted therein.

          60. (New) A document in general, having a security element according to claim 25 on at least one of its outer faces.

20           61. (New) A document in general, further comprising a security element according to claim 41, which is fully inserted therein.

          62. (New) A document in general, further comprising a security element according to claim 41, which is at least partially inserted therein.

          63. (New) A document in general, having a security element according  
25 to claim 41 on at least one of its outer faces.

          64. (New) A document in general, further comprising a security element according to claim 48, which is fully inserted therein.

          65. (New) A document in general, further comprising a security element according to claim 48, which is at least partially inserted therein.

30           66. (New) A document in general, having a security element according

to claim 48 on at least one of its outer faces.